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| | | | | Application Number | 10/048,071 |
| | | | | Filing Date | July 28, 2000 |
| | | | | First Named Inventor | O'DONNELL |
| | | | | Art Unit | 1645 |
| | | | | Examiner Name | Padmavathi Baskar |
| | | | | Attorney Docket Number | 22221/1023 (RU-429) |
| Sheet | 1 | of | 3 | | |

| U.S. PATENT DOCUMENTS | | | | | |
|--------------------------------|-----------------------|--|--------------------------------|--|---|
| Examiner Initials ¹ | Cite No. ¹ | U.S. Patent Document Number – Kind Code ² (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | 1. | 09/235,245 | | O'Donnell | |
| | 2. | 5,635,349 | 06-03-1997 | LaMarco et al. | |
| | 3. | 6,077,664 | 06-20-2000 | Slater et al. | |
| | 4. | 6,100,030 | 08-08-2000 | McCasky Feazel et al. | |
| | 5. | 6,156,502 | 12-05-2000 | Beattie | |
| | 6. | 5,151,350 | 09-29-1992 | Colbert et al. | |
| | 7. | 5,376,526 | 12-27-1994 | Brown et al. | |
| | 8. | 5,459,039 | 10-17-1995 | Modrich et al. | |
| | 9. | 5,556,750 | 09-17-1996 | Modrich et al. | |
| | 10. | 5,571,676 | 11-05-1996 | Shuber | |
| | 11. | 5,583,026 | 12-10-1996 | O'Donnell | |
| | 12. | 5,679,522 | 10-21-1997 | Modrich et al. | |
| | 13. | 5,683,877 | 11-04-1997 | Lu-Chang et al. | |
| | 14. | 6,083,924 | 07-04-2000 | Earnshaw et al. | |
| | 15. | 6,420,161 B1 | 07-16-2002 | Earnshaw et al. | |
| | 16. | 5,587,288 | 12-24-1996 | Cheung et al. | |

| U.S. PUBLISHED PATENT DOCUMENTS | | | | | |
|---------------------------------|-----------------------|--|--------------------------------|--|---|
| Examiner Initials ¹ | Cite No. ¹ | U.S. Patent Document Number – Kind Code ² (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | 17. | 2003/0129633 A1 | 07-10-2003 | O'Donnell et al. | |

| FOREIGN PATENT DOCUMENTS | | | | | | | |
|--------------------------|-----------------------|---------------------------|---|--------------------------------|--|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Country Code ³ | Number ⁴ Kind Code ⁵ (if known) | | | | |
| | 18. | EP0786519 | A2 | 07-30-1997 | Kunsch et al. | | |
| | 19. | WO99/13060 | A1 | 03-18-1999 | McHenry et al. | | |
| | 20. | WO96/06614 | A1 | 03-07-1996 | Brown et al. | | |
| | 21. | WO99/37661 | A1 | 07-29-1999 | O'Donnell et al. | | |
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| | | | | Examiner Name | Padmavathi Baskar |
| Sheet | 2 | of | 3 | Attorney Docket Number | 22221/1023 (RU-429) |

| OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | | | |
|---|-----------------------|---|----------------|
| Examiner Initials ¹ | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | 22. | Biotechnology Industry Organization, "Critical Synergy: The Biotechnology Industry and Intellectual Property Protection," 1-178, 74-95, Presentations of the Intellectual Property Committee of the Biotechnology Industry Organization at the October 17, 1994, Hearing of the U.S. Patent and Trademark Office (October 17, 1994), <i>available at</i> http://www.uspto.gov/web/offices/com/hearings/biotech/bioind.html (last accessed January 10, 2005) | |
| | 23. | Cullmann et al., "Characterization of the Five Replication Factor C Genes of <i>Saccharomyces cerevisiae</i> ," <i>Mol. Cell. Biol.</i> 15(9):4661-71 (1995) | |
| | 24. | Fraser et al., "The Minimal Gene Complement of <i>Mycoplasma genitalium</i> ," <i>Science</i> 270:397-403 (1995) | |
| | 25. | Guenther et al., "Crystal Structure of the δ' Subunit of the Clamp-loader Complex of <i>E. coli</i> DNA Polymerase III," <i>Cell</i> 91:335-45 (1997) | |
| | 26. | Guenther, "Structural Studies on the DNA Replication Apparatus: X-Ray Crystal Structure of the δ' Subunit of <i>Escherichia coli</i> DNA Pol III," at 129-135 (Ph.D. thesis, Rockefeller University) (1996) | |
| | 27. | Lee & Walker, " <i>Escherichia coli</i> DnaX product, the τ Subunit of DNA Polymerase III, Is a Multifunctional Protein with Single-stranded DNA-dependent ATPase Activity," <i>Proc. Nat'l Acad. Sci. U.S.A.</i> 84:2713-7 (1987) | |
| | 28. | McHenry et al., "A DNA Polymerase III Holoenzyme-like Subassembly from an Extreme Thermophilic Eubacterium," <i>J. Mol. Biol.</i> 272:178-89 (1997) | |
| | 29. | Morrison et al., "A Third Essential DNA Polymerase in <i>S. cerevisiae</i> ," <i>Cell</i> 62:1143-51 (1990) | |
| | 30. | Pacitti et al., "Characterization and Overexpression of the Gene Encoding <i>Staphylococcus aureus</i> DNA Polymerase III," <i>Gene</i> 165:51-6 (1995) | |
| | 31. | Sauer et al., "Sporulation and Primary Sigma Factor Homologous Genes in <i>Clostridium acetobutylicum</i> ," <i>J. Bacteriol.</i> 176(21):6572-82 (1994) | |
| | 32. | Seville et al., "Fluorometric Assay for DNA Polymerases and Reverse Transcriptase," <i>BioTechniques</i> 21:664-72 (1996) | |
| | 33. | Youmans et al., THE BIOLOGICAL AND CLINICAL BASIS OF INFECTIOUS DISEASE 624, 802 (1985) | |
| | 34. | Yurieva et al., " <i>Thermus thermophilus</i> dnaX Homolog Encoding γ - and τ -like Proteins of the Chromosomal Replicase," <i>J. Biol. Chem.</i> 272(43):27131-9 (1997) | |
| | 35. | GenBank Accession No. AP003130 | |

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|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|

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| | 36. | GenBank Accession No. AP003359 | |
| | 37. | GenBank Accession No. AL009126 | |
| | 38. | GenBank Accession No. BAB41666 | |
| | 39. | GenBank Accession No. BAB56640 | |
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| | 41. | GenBank Accession No. P28630 | |
| | 42. | GenBank Accession No. P43747 | |
| | 43. | GenBank Accession No. Q9Y5S2 | |
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